



Transmittal Note

AMENDMENT No. 1
to the
SUPPLEMENT TO ANNEX 3 (TENTH EDITION)

METEOROLOGICAL SERVICE FOR INTERNATIONAL AIR NAVIGATION

To incorporate Amendment No. 1 to the Supplement:

1. Replace the following pages by the corresponding new pages dated 31/12/91:

iii to vii; Australia; Canada; Germany; Madagascar; Malaysia; New Zealand; Norway;
Saudi Arabia; United States; Vanuatu.
 2. Insert the following new pages dated 31/12/91:

Belgium; Chile; Colombia; Ecuador; Greece; India; Japan; Panama; Uruguay.
 3. On the pages for Denmark, Finland, France, Sweden and the United Kingdom, change the date by hand to read 31/12/91.
 4. Remove the pages for Argentina, Bangladesh and Barbados.
 5. Record this amendment on page ii of the Supplement.
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1. Contracting States which have notified ICAO of differences

The Contracting States listed below have notified ICAO of differences which exist between their national regulations and practices and the International Standards and Recommended Practices of Annex 3, Tenth Edition, or have commented on their implementation.

State	Date of notification	Pages in Supplement	Date of publication
Australia	14/11/90	1	31/12/91
Belgium	27/10/89	1	31/12/91
Canada	11/10/89	1-2	31/12/91
Chile	7/6/89	1	31/12/91
Colombia	31/10/89	1	31/12/91
Democratic People's Republic of Korea	7/3/88	1	31/8/88
Denmark	3/10/89	1	31/12/91
Ecuador	15/4/91	1	31/12/91
Finland	5/7/89	1	31/12/91
France	3/11/89	1	31/12/91
Germany	3/10/89	1	31/12/91
Greece	11/1/91	1	31/12/91
India	8/6/89	1	31/12/91
Japan	24/10/89	1	31/12/91
Madagascar	10/11/89	1	31/12/91
Malaysia	18/9/89	1	31/12/91
New Zealand	22/9/89	1-2	31/12/91
Norway	31/8/89	1	31/12/91
Panama	15/5/89	1	31/12/91
Papua New Guinea	3/6/87	1	31/8/88
Saudi Arabia	25/3/91	1	31/12/91
Sweden	27/9/89	1	31/12/91
Trinidad and Tobago	1/6/87	1	31/8/88
Union of Soviet Socialist Republics	4/1/88	1	31/8/88
United Arab Emirates	30/6/88	1	31/8/88
United Kingdom	14/8/89	1	31/12/91
United States	2/11/89	1-2	31/12/91
Uruguay	27/6/89	1	31/12/91
Vanuatu	28/4/89	1	31/12/91
Zambia	9/11/87	1	31/8/88

2. Contracting States which have notified ICAO that no differences exist

State	Date of notification	State	Date of notification
Argentina	19/10/89	Iran, Islamic Republic of	11/8/87
Austria	10/7/89	Ireland	16/9/87
Bahrain	24/5/89	Italy	17/8/89
Bangladesh	19/7/89	Malawi	5/7/89
Barbados	9/5/89	Mexico	27/9/89
Brazil	4/9/87	Morocco	4/1/88
Brunei Darussalam	22/4/87	Netherlands, Kingdom of the	24/10/89
Burkina Faso	2/6/87	Niger	12/7/89
Burundi	---	Peru	21/4/89
Cuba	11/7/89	Portugal	19/10/87
Cyprus	12/6/89	Republic of Korea	5/9/89
Czechoslovakia	14/7/89	Senegal	---
Egypt	21/7/89	Seychelles	19/5/89
Ethiopia	4/1/91	Singapore	1/9/89
Fiji	18/5/89	Sri Lanka	2/10/87
Gambia	25/11/89	Switzerland	11/10/89
Guinea-Bissau	31/5/87	United Republic of Tanzania	24/10/89
Guyana	5/10/87	Yugoslavia	7/10/87
Honduras	5/6/87	Zimbabwe	10/7/89
Hungary	2/6/89		

1. Contracting States from which no information has been received

Afghanistan	Guinea	Oman
Albania	Haiti	Pakistan
Algeria	Iceland	Paraguay
Angola	Indonesia	Philippines
Antigua and Barbuda	Iraq	Poland
Bahamas	Israel	Qatar
Belize	Jamaica	Romania
Benin	Jordan	Rwanda
Bhutan	Kenya	Saint Lucia
Bolivia	Kiribati	Saint Vincent and the Grenadines
Botswana	Kuwait	San Marino
Bulgaria	Lao People's Democratic Republic	Sao Tome and Principe
Cambodia	Lebanon	Sierra Leone
Cameroon	Lesotho	Solomon Islands
Cape Verde	Liberia	Somalia
Central African Republic	Libyan Arab Jamahiriya	South Africa
Chad	Luxembourg	Spain
China	Maldives	Sudan
Comoros	Mali	Suriname
Congo	Malta	Swaziland
Cook Islands	Marshall Islands	Syrian Arab Republic
Costa Rica	Mauritania	Thailand
Côte d'Ivoire	Mauritius	Togo
Djibouti	Monaco	Tonga
Dominican Republic	Mongolia	Tunisia
El Salvador	Mozambique	Turkey
Equatorial Guinea	Myanmar	Uganda
Federated States of Micronesia	Namibia	Venezuela
Gabon	Nauru	Viet Nam
Ghana	Nepal	Yemen
Grenada	Nicaragua	Zaire
Guatemala	Nigeria	

4. Summary of differences

Paragraph	Difference notified by	Paragraph	Difference notified by
Chapter 1	France United Kingdom	4.5.8	Canada USSR
2.3.1	France	4.6.2	India
3.3.1 c)	Japan	4.7	New Zealand Panama Trinidad and Tobago Zambia
f)	Japan	4.7.5	Belgium India USSR
g)	Japan	4.7.6	Chile Vanuatu
h)	Japan	4.7.7	Chile Vanuatu
3.3.5	India	4.7.8 a)	Denmark Germany
3.3.7	India	b)	Denmark Germany
3.3.8	India	4.7.10	Belgium Canada
3.4.2 h)	United States	4.7.11	Belgium India
3.4.4	Canada	4.7.13	Madagascar
4.1.3	India	4.7.14	Canada Germany United States
4.1.7	Chile New Zealand Vanuatu	4.8.2	Canada New Zealand Papua New Guinea
4.3	Australia	4.9.2	Vanuatu
4.3.1	New Zealand	4.9.3	USSR
4.3.3	Malaysia New Zealand	4.9.4	Canada
4.3.3 a)	Papua New Guinea USSR United States	4.11.1	Panama
b)	Papua New Guinea USSR United States	4.11.3	France
c)	USSR United States	4.11.4	New Zealand
d)	Papua New Guinea United States	4.12	Belgium
e)	Germany Papua New Guinea United Arab Emirates United States Uruguay	4.12.1	Democratic People's Republic of Korea
f)	United States	4.12.3	Panama
g)	Papua New Guinea United States	4.13.1	Canada Malaysia
4.5.2	India	4.13.3	Canada Chile Ecuador New Zealand United States
4.5.3	Colombia	4.14.2	New Zealand
4.5.4	Colombia Greece Malaysia United States	4.14.2 a)	USSR
4.5.5	Canada India	4.14.5	Canada
4.5.5 a)	USSR	4.15	United States
b)	Belgium	5.7.1	Finland New Zealand United Kingdom
4.5.6	USSR		
4.5.7	Germany		

Paragraph	Difference notified by	Paragraph	Difference notified by
6.2.2	Canada	7.4	Belgium
6.2.8	New Zealand		Canada
	USSR		Malaysia
6.2.11	Canada	7.4.1	Denmark
6.2.12	Canada		India
6.2.13	Canada		New Zealand
6.3	Canada		Sweden
6.3.1	Chile	7.4.2	Colombia
	Colombia		Ecuador
	Ecuador		Saudi Arabia
6.3.4	New Zealand		
6.3.6	New Zealand	8.1.1	Chile
6.3.8	Belgium		Greece
	Greece	8.2.1 b)	Colombia
	USSR	8.2.3	Canada
6.3.9	Belgium		Colombia
	Greece	8.3.2	Canada
	New Zealand	8.4	Saudi Arabia
6.3.10	Belgium	8.4.1	Colombia
	New Zealand		
6.3.11	Belgium	9.1.3	Chile
	Greece	9.1.4	Sweden
	New Zealand	9.3.8	Chile
6.3.12	USSR		Colombia
6.4	Canada		Panama
6.4.1	Colombia	9.3.8 e)	United Kingdom
	Ecuador	h)	United Kingdom
	United Kingdom	i)	United Kingdom
6.5.5	Chile	9.4.4 d)	Madagascar
6.5.7	New Zealand	9.4.13	Sweden
6.5.8	Canada	9.5.1	Chile
		9.6.1	Chile
7.1.1	New Zealand		India
7.1.1 b)	Denmark	9.6.1 c)	Japan
	Norway	e)	Japan
	Sweden	f)	Japan
7.2.1	New Zealand	g)	Japan
7.2.1 a)	Germany	h)	Japan
7.2.2	Canada	j)	Japan
7.2.6	New Zealand	l)	Japan
	United States	9.7.1	Sweden
7.3	Canada	9.9.1	Chile
	Norway		
7.3.1	Colombia	11.4	Chile
	Finland	11.4.1	Colombia
	Sweden	11.4.7	Canada

Chapter 4

.3 The SPECI remains valid for as long as conditions are below the specified minima.

It is the Australian view that labelling a METAR as a SPECI simply to denote the fact that conditions remain below specified criteria is of assistance to ATS staff as it provides a trigger to the possibility that a particular aircraft may be heading for marginal weather conditions.

Chapter 4

4.5.5* b) The wind reported by the meteorological service to air traffic services units is averaged over a period of 10 minutes.

Note.- Air traffic control units are provided with a spot wind and a two-minute average (direction and speed) repeater.

4.7.5* Runway visual range observations are made only when the horizontal visibility is 1 200 metres or less.

4.7.10* Runway visual range above 500 metres is reported in increments of 100 metres.

4.7.11* The lower limit for assessments of runway visual range is 75 metres.

4.12* Not used.

Chapter 6

6.3.8; 6.3.9;
6.3.10; 6.3.11 The change criteria for trend-type landing forecasts are the same as those governing the preparation of special observations, except for 6.3.9 the value 1 200 metres is also included.

Chapter 7

7.4* Not used.

Chapter 3

3.4.4* Landing forecasts are not produced.

Chapter 4

4.5.5* Surface wind observations in reports disseminated beyond the aerodrome are averaged over two minutes.**

4.5.8* For aviation weather reports distributed in Canada and from Canada to the United States, wind speed is reported in knots, but the units are not specified in the observations.

4.7.10* Rather than representing the lower step in the scale, the reported RVR is the median point of the increment. For example, the reading "12" indicates the RVR lies between 1 100 and 1 299 ft.

4.7.14* RVR observations are not included in reports disseminated beyond the aerodrome.

4.8.2*; 4.14.5 Abbreviations for present weather differ from those recommended. The term "fog" is used for both mist and fog in reports and in air-ground communications.**

4.9.4* Cloud amounts are cumulative and are given for all layers up to, and including, the first overcast layer, if any. Amounts are given as:

CLR: clear - no cloud;
SCT: scattered - 1/8 to 4/8 incl.;
BKN: broken - 5/8 to 7/8; and
OVC: overcast - 8/8.

4.13.1* The order of elements differs from that recommended and used in METAR and SPECI code forms.**

4.13.3 The term CAVOK is not used.**

Chapter 6

6.2.2 In aerodrome forecasts in abbreviated plain language only, wind is not included when the speed is forecast to be less than 10 knots. (This does not apply to aerodrome forecasts in TAF code.)

6.2.11* In aerodrome forecasts in abbreviated plain language only, cloud amounts are cumulative and are given for all layers up to, and including, the first overcast layer, if any. Amounts are given as:

CLR: clear - no cloud;
SCT: scattered - 1/8 to 4/8 incl.;
BKN: broken - 5/8 to 7/8; and
OVC: overcast - 8/8.

The term CAVOK is not used.

* Recommended Practice

** This notification applies to reports exchanged in Canada and between Canada and United States in abbreviated plain language only.

- 6.2.12* The identification of forecasts and amended forecasts in abbreviated plain language, and of the period of validity of those forecasts, differs from the Recommended Practice.
- 6.2.13* In aerodrome forecasts in abbreviated plain language only, the order of elements and the abbreviations for significant weather differ from those recommended. The term "fog" is used for both mist and fog. (This does not apply to aerodrome forecasts in TAF code.)
- 6.3 Landing forecasts are not issued. Regular aerodrome forecasts are used for this purpose.
- 6.4 Forecasts for take-off are not issued. Regular aerodrome forecasts are used for this purpose.
- 6.5.8* The identification of forecasts or amended forecasts exchanged within Canada or between Canada and the United States differs from those recommended.

Chapter 7

- 7.2.2 SIGMETs prepared for distribution outside Canada or the United States may be written in non-abbreviated plain English.
- 7.3 Separate aerodrome warnings are generally not issued.
- 7.4* Canada does not issue wind shear warnings on a routine basis. Wind shear observations cannot be made satisfactorily from the ground.

Chapter 8

- 8.2.3*; 8.3.2* Aerodrome climatological tables and summaries concerning RVR are not available.

Chapter 11

- 11.4.7* The term "fog" is used for both mist and fog in VOLMET broadcasts.

* Recommended Practice

Chapter 4

- 4.1.7* There is no automated equipment for the remote measurement of surface wind, runway visual range or cloud height at most of the country's aerodromes, except for Arturo Merino Benitez and Carlos Ibanez del Campo airports.
- 4.7.6*; 4.7.7* There are no instrumental means for measuring runway visual range, except at Arturo Merino Benitez airport, which has a (1) transmissometer.
- 4.13.3 Whenever the term "CAVOK" is used, in accordance with the current description, the information is supplemented with a report on existing cloud amounts, following the criteria laid down for reporting cloud amount in the METAR code.

Chapter 6

- 6.3.1 Landing forecasts shall be prepared only when meteorological conditions differ significantly from the aerodrome forecast (TAF code) and/or at the express request of users.
- 6.5.5* The list of criteria for the issuance of amendments to area and route forecasts does not include wind variations or upper air temperatures.

Chapter 8

- 8.1.1 The climatological information available is incomplete.

Chapter 9

- 9.1.3 The take-off and landing forecasts are supplied at the request of operations and/or when conditions differ significantly from the aerodrome forecast.
- 9.3.8 The following are not displayed:
- landing or take-off forecasts;
 - pictorial cross-sections;
 - weather radar information.
- 9.5.1 All the information is supplied on the basis of current charts and prognostic charts supplied by a WAFC.
- 9.6.1 Significant weather charts are not prepared.
- 9.9.1 There are no VOLMET broadcasts in Chile.

Chapter 11

- 11.4 There are no VOLMET broadcasts in Chile.

* Recommended Practice

Chapter 4

- 4.5.3* Landing and take-off messages do not include information on representative wind for the entire length of the runway, except at Bogota.
- 4.5.4 At some airports, the surface wind recorders or indicators located in the ATS units are not connected to the same sensor used by the meteorological station.

Chapter 6

- 6.3.1; 6.4.1 Trend-type landing forecasts are provided upon request at the major aerodromes.

Chapter 7

- 7.3.1 Aerodrome warnings are not issued.
- 7.4.2* Wind shear warnings are not issued.

Chapter 8

- 8.2.1* b) Aerodrome climatological tables are provided to each user upon request.
- 8.2.3* There are no aerodrome climatological tables or summaries that relate to runway visual range.
- 8.4.1* There are no aeronautical descriptive climatological memoranda.

Chapter 9

- 9.3.8 The information in c), d) and i) is not displayed.

Chapter 11

- 11.4.1 VOLMET broadcasts are not made.

Chapter 4

4.13.3 The term CAVOK is not used in METAR and SPECI reports.

Chapter 6

6.3.1 Trend-type landing forecasts are provided at Mariscal Sucre airport, Quito, on a regular basis, and at the other international airports on request.

6.4.1 Take-off forecasts are provided at the user's request.

Chapter 7

7.4.2* Wind shear warnings are not issued.

* Recommended Practice

Chapter 4

- 4.3.3* e) A value of 200 m instead of 150 m is applied for runway visual range.
- 4.5.7* Multiple sensors for wind observations are not yet monitored by automatic equipment at all airports.
- 4.7.8* a), b); The runway visual range is determined on the basis of the maximum
4.7.14* intensity (100 per cent) of the runway lighting.

Chapter 7

- 7.2.1 a) Germany does not identify all SIGMET messages by the location indicator of the ATS unit serving the flight information region. In those cases where the airspace is divided into a flight information region (FIR) and an upper flight information region (UIR) and when the SIGMET refers to the UIR only, the SIGMET will be identified by the location indicator of the ATS unit servicing the UIR.
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Chapter 4

- 4.5.4 The surface wind indicators, in the meteorological station and in the air traffic services units, of RWY 33 of the Athinai airport are not connected to the same sensor.

Chapter 6

- 6.3.8; 6.3.9; 6.3.11 Additional criteria other than those of Annex 3 have been determined in accordance with the requirements of operators.

Chapter 8

- 8.1.1 Climatological information is available from synoptic observations.
Aeronautical climatological information is in preparation.
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Chapter 3

- 3.3.5* The prognostic significant weather charts are valid for fixed time cum fixed duration. The forecasts are valid for 12 hours and the positions of pressure systems refer to the mid-point of the validity period of the forecasts.
- 3.3.7*; 3.3.8* The prognostic significant weather charts cover the layer from surface to FL 460 only.

Chapter 4

- 4.1.3* Ideal conditions do not exist in all aerodromes.
- 4.5.2*; 4.5.5* Where automatic wind-indicating instruments are used with sensors located near take-off/touchdown areas, observations from these instruments form the information for take-off/landing reports as well as for messages disseminated beyond the aerodrome. No differentiation is made between reports supplied to ATS units and those disseminated beyond aerodromes.
- 4.6.2* The general visibility reported in the messages issued to ATS units and those disseminated beyond the aerodrome is the lowest visibility observed at the aerodrome and its vicinity. Significant directional variations in visibility are included in the supplementary information.
- For reports for take-off/landing, the visibility is representative of the conditions of the appropriate areas as indicated by instruments, if available, or by visual observations.
- 4.7.5* RVR observations are made when horizontal visibility is less than 2 000 m.
- 4.7.11* The lower limit for RVR instrumental observation is 270 m (and 330 m at some aerodromes).

Chapter 7

- 7.4.1* Wind shear warnings are not issued to ATS units. Wind shear information is included in aviation weather reports as supplementary information.

Chapter 9

- 9.6.1 The prognostic significant weather charts are valid for fixed time cum fixed duration. The forecasts are valid for 12 hours and the positions of pressure systems refer to the mid-point of the validity period of the forecasts.

Chapter 3

- 3.3.1 c) Abbreviated plain-language amendments in upper wind and temperature charts are not supplied.
- f) Abbreviated plain-language amendments in significant weather charts and in significant weather forecast messages are not supplied.
- g) Significant weather charts and abbreviated plain-language amendments thereto are not exchanged between the RAFCs concerned.
- h) WITEM messages are not prepared or issued.

Chapter 9

- 9.6.1 c); g); h); The information is not indicated.
j); l)
- e); f) The information on significant weather phenomena is indicated as "CB".
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Chapter 4

4.7.13* RVR observations at the mid-point of runways are not made.

Chapter 9

9.4.4* d) Madagascar continues to use ICAO location indicators.

* Recommended Practice

Chapter 4

- 4.3.3* Special observations and special reports are made/issued with respect to visibility changes to or past 5 000 m, 1 500 m and 800 m. RVR is not disseminated.
- 4.5.4 In some airports, wind indicators in meteorological stations and ATS are not from the same sensors.
- 4.13.1* RVR is not reported.

Chapter 7

- 7.4* Wind shear warnings are not issued.
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* Recommended Practice

Chapter 4

- 4.1.7* RVR is not observed.
- 4.3.1 Reports of routine observations are identified as SPECI reports when the observed conditions meet the criteria used for special observations.
- 4.3.3* The criteria used for special observations differ slightly from those recommended by ICAO.
- 4.7* RVR is not observed.
- 4.8.2* With regard to METAR and SPECI reports, in addition to the code figures and abbreviations listed, code figures 00 to 03, 09, 13 to 16, 28, 76 and 78 will be used. They will not have letter abbreviations. They will have the same meanings as the corresponding code figures in code table 4677, World Meteorological Organization (WMO) publication 306, *Manual on Codes*, Volume 1.
- 4.11.4* QNH is reported in tenths of a hectopascal.
- 4.13.3 The term CAVOK is not used.
- 4.14.2 With regard to METAR and SPECI reports, when the horizontal visibility is 10 km or more, it will be coded in whole kilometres followed immediately by the letters "KM", e.g. 15KM.

Chapter 5

- 5.7.1 Forms for special air-report for volcanic activity will not be available.

Chapter 6

- 6.2.8 The TAF forecasts contain slightly more information than specified in WMO publication 306, *Manual on Codes*, Volume 1.
- With regard to TAF forecasts, when the horizontal visibility is expected to be 10 km or more, it will be coded in whole kilometres followed immediately by the letters "KM", e.g. 15KM.
- The term CAVOK is not used in TAF forecasts.
- 6.3.4 The period of validity of trend-type landing forecasts shall be three hours from the time of the report.
- 6.3.6 The change indicator TEND is not used.
- 6.3.9 The trend part of the trend-type landing forecast indicates a change when the horizontal visibility is expected to change to, or pass, one of the following values:
- 800 m, 1 500 m, 3 000 m, 5 000 m or 8 km.
- 6.3.10 The trend part of the trend-type landing forecast indicates a change when the onset or cessation of a thunderstorm, freezing precipitation or fog is expected.

* Recommended Practice

- 6.3.11 The trend part of the trend-type landing forecast indicates a change when the height of the base of cloud covering more than 4 oktas is expected to change to, or pass, one of the following values:

200 ft, 500 ft, 1 000 ft or 1 500 ft.

- 6.5.7 Route forecasts are normally issued in a self-evident plain-language form, but, on request, these will be issued in the ROFOR code form specified in WMO publication 306, *Manual on Codes*, Volume 1.

Chapter 7

- 7.1.1 SIGMETs on volcanic ash clouds shall be issued only when they are known to exist. The SIGMETs should include an indicator of future movement where possible.
- 7.2.1 In SIGMETs issued for domestic FIRs the date-time groups are given in both local time and UTC.
- 7.2.6* SIGMET messages concerning volcanic ash cloud will be issued 12 hours before the commencement of the period of validity or as soon as practicable if advance warning of the existence of the volcanic ash cloud is not available.
- 7.4.1* Information about wind shear observed on the approach or take-off paths is included, when appropriate, in METAR and SPECI reports.
- Information on the expected existence of wind shear which could adversely affect aircraft on approach and take-off paths is not provided.
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* Recommended Practice

Chapter 7

- 7.1.1 b) Not practised because supersonic flights are not allowed in Norwegian territory.
- 7.3 Usually not practised.
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Chapter 4

- 4.7* Observations of runway visual range are not performed.
- 4.11.1* QNH and QFE values are calculated in hundredths of an inch instead of full millibars (hPa).
- 4.12.3* Wind shear in the approach area is not reported.

Chapter 9

- 9.3.8 The following are not displayed:
- take-off and landing forecasts;
 - pictorial cross-sections;
 - SIGMET information;
 - prognostic charts;
 - weather radar information.
-

Chapter 7

7.4.2* Wind shear warnings are not issued on a routine basis.

Chapter 8

8.4* Aeronautical descriptive climatological memoranda are available on request.

* Recommended Practice

Chapter 3

- 3.4.2 h) The United States relies mainly on information derived from satellite and aircraft observations.

Chapter 4

- 4.3.3* a); b); c) Practices require special observations due to changes in surface winds only when:

- a) the average one-minute wind speed suddenly increases to twice or more than twice the currently reported one-minute wind speed and exceeds 25 kt; or
- b) the wind shifts (a term applied to a change in wind direction of 45° or more which takes place in less than 15 minutes).

In addition, United States practices are to report any observation of wind variation when the wind direction varies by more than 60° and wind speed is more than 6 kt.

- d) Practices require special observations to be taken due to changes in visibility when prevailing visibility as reported in the body of the report decreases to less than, or if below, increases to equal or exceed:
 - a) 3 miles;
 - b) 2 miles;
 - c) 1½ miles;
 - d) 1 mile; or
 - e) all nationally published landing minimums applicable to the airport.
- e) Practices require special observations due to changes in RVR when the highest value from the designated RVR runway during the preceding 10 minutes decreases to less than, or if below, increases to equal or exceeds 2 400 ft.
- f) Practices do not require special observations for the beginning, ending or change in intensity of:
 - a) a mixture of rain and snow;
 - b) drifting snow;
 - c) duststorm; or
 - d) sandstorm.

* Recommended Practice

4.3.3* g) Practices are to take special observations when the ceiling forms or dissipates below, decreases to less than, or if below, increases to equal or exceeds:

- a) 3 000 ft;
- b) 1 500 ft;
- c) 1 000 ft;
- d) 500 ft;
- e) all nationally published landing minimums applicable to the airport.

(Ceiling is defined as the height ascribed to the lowest opaque layer aloft covering 6/10 or more of the sky, or the vertical visibility in a surface-based layer of obscuring phenomena.) Special observations are also required when a layer of clouds or obscuring phenomena aloft is present below 1 000 ft, or present below the highest published landing minimum applicable to the airport, and no such layer aloft was reported in the previous observation.

4.5.4 Surface wind indicators from all sensors are not located in meteorological offices at aerodromes where such offices are located.

4.7.14* Where there is more than one runway in use for landing, touchdown zone runway visual range values should be included for all such runways.

4.13.3 The United States does not use the term CAVOK in the meteorological reports it prepares.

4.15* The United States relies mainly on information derived from satellite and aircraft observations.

Chapter 7

7.2.6* SIGMET messages concerning volcanic ash cloud are not issued 12 hours before the commencement of the period of validity.

* Recommended Practice

Chapter 4

4.3.3* e) The values 200, 400 or 800 m are applied for runway visual range.

* Recommended Practice

31/12/91

Chapter 4

- 4.1.7* Equipment is not available for measuring surface wind.
- 4.7.6*; 4.7.7* Instrumentation is not available for measurement of RVR.
- 4.9.2* Cloud observations are only representative of the aerodrome and its immediate vicinity.
-

* Recommended Practice

